

## Pack 502 Pinewood Derby Rules

Purpose: SPORTSMANSHIP AND GOOD CITIZENSHIP are taught by following the Derby rules and cheering on fellow Scouts as they race. PERSONAL ACHIEVEMENT comes to Scouts who pick up a woodworking tool and shape raw wood into an original design. And, by learning woodworking, the Scout prepares to more easily serve in the pack's service projects. FAMILY UNDERSTANDING is enhanced because building a Pinewood Derby car puts the Scout and Akela into a close and intense learning experience over many hours.

Design standards:

1. The official B.S.A. car kit must be used, with its original wheels, axles, and wood block.
2. The car's weight must be 5 ounces or less.
3. The car's height must be  $2\frac{3}{4}$  (2.75) inches or less.
4. The car's length must be 7 inches or less.
5. The car's underside clearance must be at least  $\frac{3}{8}$  (0.375) inches, to clear the track.
6. The wheel-to-wheel clearance must be at least  $1\frac{3}{4}$  (1.75) inches.
7. The inside of the wheel may not be altered.
8. The original axle locations in the wood block must be used.
9. Axles may only be deburred and polished. Graphite paint, grooves, notches, bends, etc, are not permitted.
10. Only dry graphite may be used as a lubricant.
11. Wheel treatment is allowed (hub and tread smoothing and polishing, deburred). It must not result in substantial removal of mass or reduction of the tread width (track contact) from the original kit wheels.
12. The words "Official B.S.A. Made in U.S.A." and other lettering on the wheels must be intact and visible.
13. All four wheels must touch the ground across the full width of each wheel.
14. The entire car must stage behind the starting pin. Inset front ends are not allowed, that would extend part of the car in front of the starting pin.
15. The wheels and axles may not use hubcaps, washers, inserts, sleeves, nor bearings.
16. Add-on decorations, paint and weights are permitted that do not exceed the design standards for racing.
17. Accelerants and propellants are not permitted for competitive racing, e.g. springs, bands, jet packs, etc.

- **The Scout should work on their car as much as possible.**
- Cars from past races are not permitted.
- Each Scout may enter 1 car. Name the car, ex. "Fireball."
- Competitive categories: Speed and design
- SPEED: Scouts compete for the fastest car within each den. The den winners and the next 3 fastest cars re-compete for the fastest car in the pack. Lowest total time across each set of heats determines the winner in each den/pack category.
- DESIGN: Design award categories are Most Patriotic, Most Scout-Like, Most Texan, Most Humorous, Fastest Looking, Most Creative.

For unforeseen circumstances during the race, the Race Official will use their best judgement to resolve the matter. The decisions of the Race Official are final.

Turn-in is at the Thursday pack meeting 2 days prior to Race Day. Cars are impounded until Race Day. The Pinewood Derby begins at 12pm for setup and 2 pm for racing on the Saturday of Race Day.

Scout Name: \_\_\_\_\_ Den: \_\_\_\_\_

Car Name: \_\_\_\_\_